

PATENT  
450100-03073

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Applicants: Masayuki HATTORI et al.  
Serial No.: 09/814,379  
Filed: March 21, 2001  
For: METHOD AND APPARATUS FOR REPRODUCING  
DATA AND METHOD AND APPARATUS FOR  
RECORDING AND/OR REPRODUCING DATA  
Art Unit: 2653

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Sir:

In compliance with the duty of disclosure set forth in 37 C.F.R. 1.56, applicants are filing this Information Disclosure Statement and the accompanying form PTO-1449 along with copies of the prior art therein identified. Such prior art has come to the attention of


applicants by being cited in a Search Report issued in the corresponding European application on November 18, 2004. A copy of this Search Report is enclosed for showing the relevance of any of the cited references that may be in a foreign language.

The filing of this Information Disclosure Statement is not an admission that the documents identified herein constitute prior art to the present application.

Please charge any fees incurred by the filing of this document or credit any overpayment to Deposit Account No. 50-0320.

Respectfully submitted,

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450100-03073

Based on Form PTO-1449 (3/90)  LIST OF REFERENCES CITED BY APPLICANT (Use several sheets if necessary)	ATTY. DOCKET NO. 450100-03073	SERIAL NO. 09/814,379
	APPLICANT Masayuki HATTORI et al.	
	FILING DATE March 21, 2001	GROUP 2653

U.S. PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	AA						

FOREIGN PATENT DOCUMENTS							
EXAMINER INITIAL		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION YES NO
	AB	EP 0 802 634	10/22/97	Europe			

OTHER PRIOR ART (Including Author, Title, Date, Pertinent Pages, Etc.)							
	AC		OBERG M ET AL: "Parity check codes for partial response channels" GLOBAL TELECOMMUNICATIONS CONFERENCE, GLOBECOM '99, vol. 1B, 5 December 1999 (1999-12-05), pages 717-722, XP010373642 ✓				
	AD		BENEDETTO S ET AL: "Serial Concatenation of Interleaved Codes: Performance Analysis, Design, and Iterative Decoding" TDA PROGRESS REPORT, 42-126, 'Online! 15 August 1996 (1996-08-15), XP002163216, Retrieved from the Internet: <a href="http://tmo.jpl.nasa.gov/tmo/progress_report/42-46/title.htm">URL:http://tmo.jpl.nasa.gov/tmo/progress_report/42-46/title.htm</a> > 'retrieved on 2001-03-19! ✓				
	AE		SOUVIGNIER T ET AL: "Turbo Decoding for PR4: Parallel Versus Serial Concatenation" ICC '99. 1999 IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS. CONFERENCE RECORD. VANCOUVER, CA, JUNE 6-10, 1999, IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS, NEW YORK, NY : IEEE, US, vol. VOL. 3, 6 June 1999 (1999-06-06), pages 1638-1642, XP002170541 ISBN: 0-7803-5285-8 ✓				
	AF		FAN J L ET AL: "Constrained Coding Techniques for Soft Iterative Decoders" 1999 IEEE GLOBAL TELECOMMUNICATIONS CONFERENCE. GLOBECOM'99. SEAMLESS INTERCONNECTION FOR UNIVERSAL SERVICES. RIO DE JANEIRO, BRAZIL, DEC. 5-9, 1999, IEEE GLOBAL TELECOMMUNICATIONS CONFERENCE, NEW YORK, NY : IEEE, US, vol. VOL. 1B, 5 December 1999 (1999-12-05), pages 723-727, XP002170347 ISBN: 0-7803-5797-3 ✓				
	AG		PETERSEN J ET AL: INFORMATIONSTECHNISCHE GESELLSCHAFT IM VDE (ITG): "IMPLEMENTIERUNGSASPEKTE ZUR SYMBOL-BY-SYMBOL MAP-DECODIERUNG VON FALTUNGSCODES" CODIERUNG FUR QUELLE, KANAL UND UBERTRAGUNG. VORTRAGE DER ITG-FACHTAGUNG, MUNCHEN, OCT. 26-28, 1994, ITG FACHBERICHTE, BERLIN, VDE VERLAG, DE, vol. NR. 130, 1994, pages 41-48, XP000503776 ISBN: 3-8007-2036-1 ✓				
	AH		LYNCH R T: "CHANNELS AND CODES FOR MAGNETOOPTICAL RECORDING" IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS, IEEE INC. NEW YORK, US, vol. 10, no. 1, 1992, pages 57-72, XP000462065 ISSN: 0733-8716 ✓				
	AI		BATTAIL G: "POLYNOMIAL DESCRIPTION OF LINEAR BLOCK CODES AND ITS APPLICATIONS TO SOFT-INPUT, SOFT-OUTPUT DECODING" ANNALES DES TELECOMMUNICATIONS - ANNALS OF TELECOMMUNICATIONS, PRESSES POLYTECHNIQUES ET INIVERSITAIRES ROMANDES, LAUSANNE, CH, vol. 54, no. ¾, March 1999 (1999-03), pages 148-165, XP000834637 ISSN: 0003-4347 ✓				
	AJ		CIDECIYAN R D ET AL: "A PRML SYSTEM FOR DIGITAL MAGNETIC RECORDING" IEEE JOURNAL ON SELECTED AREAS IN COMMUNICATIONS, IEEE INC. NEW YORK, US, vol. 10, no. 1, 1992, pages 38-56, XP000457625 ISSN: 0733-8716 ✓				

	AK	BENEDETTO S ET AL: INSTITUTE OF ELECTRICAL & ELECTRONICS ENGINEERS: "SOFT-OUTPUT DECODING ALGORITHMS FOR CONTINUOUS DECODING OF PARALLEL CONCATENATED CONVOLUTIONAL CODES" 1996 IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS (ICC). CONVERGING TECHNOLOGIES FOR TOMORROW'S APPLICATIONS. DALLAS, JUNE 23-27, 1996, IEEE INTERNATIONAL CONFERENCE ON COMMUNICATIONS (ICC), NEW YORK, IEEE, US, vol. VOL. 1, 23 June 1996 (1996-06-23), pages 112-117, XP000625652 ISBN: 0-7803-3251-2 ✓
	AL	BENEDETTO S ET AL: "SOFT-INPUT SOFT-OUTPUT MODULES FOR THE CONSTRUCTION AND DISTRIBUTED ITERATIVE DECODING OF CODE NETWORKS" EUROPEAN TRANSACTIONS ON TELECOMMUNICATIONS, EUREL PUBLICATION, MILANO, IT, vol. 9, no. 2, 1 March 1998 (1998-03-01), pages 155-172, XP000751912 ISSN: 1124-318X ✓
	AM	OFFER E ED – INFORMATIONSTECHNISCHE GESELLSCHAFT IM VDE (ITG): "SOFT-IN/SOFT-OUT DECODERS FOR LINEAR BLOCK CODES" CODIERUNG FUR QUELLE, KANAL UND UBERTRAGUNG. VORTRAGE DER ITG-FACHTAGUNG, MUNCHEN, OCT. 26-28, 1994, ITG FACHBERICHTE, BERLIN, VDE VERLAG, DE, vol. NR. 130, 1994, pages 31-40, XP000503775 ISBN: 3-8007-2036-1 ✓
	AN	SIEGEL P H ET AL: "MODULATION AND CODING FOR INFORMATION STORAGE" IEEE COMMUNICATIONS MAGAZINE, IEEE SERVICE CENTER. PISCATAWAY, N.J, US, vol. 29, no. 12, 1 December 1991 (1991-12-01), pages 68-86, XP000287983 ISSN: 0163-6804 ✓
EXAMINER		DATE CONSIDERED
<p>* EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.</p>		